

CLAIMS

1. A system for assembly between a sheet of glass (1) comprising a
5 countersunk hole (7, 8, 9, 10) on each of its sides (3, 4) and another sheet of glass
(2) also comprising a countersunk hole (7', 8', 9', 10') on each of its sides (5, 6),
each countersunk hole being designed respectively to take first and second
connecting pieces (14, 15) made of two elements (14a, 14b, 15a, 15b) making it
possible, by clamping said elements, to introduce a preload into the countersunk
10 hole, each of the first and second connecting pieces (14, 15) being provided with a
bore, the system comprising a connecting core (19) connecting with the first and
second connecting pieces (14, 15), **characterized in that** the core (19) comprises
first (19a) and second parts of which the first part (19a) mates with the surface of
the bore of the first connecting piece (14) on which it exerts a force roughly parallel
15 to the axis of the hole and of which the second part of the connecting core (19) fits
into the bore made in the second connecting piece (15) in order therein to react to
said force.

2. The assembly system as claimed in claim 1, **characterized in that** the
bore of the first connecting piece (14) is conical and is designed to accommodate
20 the first part (19a) of the connecting core (19).

3. The assembly system as claimed in one of claims 1 and 2, **characterized
in that** the conical surface (22) of the first part (19a) of the connecting core (19) has
a cone angle roughly similar to that of the cone of the bore of the first connecting
piece (14).

25 4. The assembly system as claimed in one of the preceding claims,
characterized in that the bore of the second connecting piece (15) is roughly
cylindrical and is designed to accommodate the second part of the connecting core
(19).

5. The assembly system as claimed in one of the preceding claims
30 **characterized in that** the second part of the connecting core comprises at least a

first and a second ring (19b, 19c) which rings are eccentric and nested one inside the other.

6. The assembly system as claimed in claim 5, **characterized in that** each of the first and second rings (19b, 19c) is split.

5 7. The assembly system as claimed in one of claims 5 or 6, **characterized in that** the inner bore of the first ring (19c) is conical.

8. The assembly system as claimed in one of claims 5 to 7, **characterized in that** the outer bore of the first ring (19c) has a step (23) designed to be housed in a bore thus retaining the glass (1) should the glass (2) break.

10 9. A sheet of glass (1, 2) at least 6 mm thick, having at least one doubly countersunk hole (7, 8, 9, 10, 7', 8', 9', 10') with a conical part opening onto each side of each of the faces (3, 4, 5, 6) of the sheet of glass (1, 2) and a cylindrical central part which has roughly the same axis as the conical parts, **characterized in that** it comprises, inside each countersunk hole, a connecting piece (14, 15), the
15 connecting pieces being designed to join together so as to allow mounting with the assembly system as claimed in any one of the preceding claims.

10. The sheet of glass as claimed in claim 9, **characterized in that** the connecting piece or pieces (14, 15) and possibly the connecting core (19) are equipped with holding means such as holes, bosses, etc. for transmitting loads
20 directed roughly in the plane of the sheets of glass either to a structural element or to another sheet of glass.

11. The application of the sheet as claimed in one of claims 9 to 10 to the production of entities formed of prefabricated elements assembled on site.